

IN THE CLAIMS

Please amend the claims as follows:

1. (Currently Amended) An information recording medium storing encrypted content, ~~having a configuration in which~~ comprising:

a first recording area including content and an entity code that is set for each entity included in a manufacturing route of said information recording medium, wherein the first recording area includes an ~~and data included in a certain~~ encryption processing unit that is encrypted by a key generated based ~~on the basis of~~ a seed that provides ~~providing~~ encryption processing key generating information ~~[[set]]~~ for each ~~[[said]]~~ encryption processing unit, wherein ~~[[and]]~~

said entity code is stored in an encrypted area ~~which~~ that is encrypted by said key generated based ~~on the basis of~~ said seed, said encrypted area not overlapping an area ~~[[to]]~~ in which said seed is ~~[[set]]~~ recorded, wherein said entity code includes an authoring studio code identifying an authoring studio and a disc manufacturer code identifying a manufacturer.

2. (Currently Amended) The information recording medium according to claim 1, wherein said encryption processing unit is set as a collective data area ~~[[of]]~~ including a plurality of packets, and said seed is set as data having ~~[[the]]~~ a predetermined number of bits from start data of a start packet of said encryption processing unit; and

said entity code is stored as a payload of each of said plurality of packets and stored in a data area not overlapping an area of bits constituting said seed.

3. (Original) The information recording medium according to claim 1, wherein said entity code is stored in a program map table (PMT) specified by the MPEG standard and said

entity code provides data constituting a start packet of a plurality of divided packets storing said program map table (PMT) in a program information area of said program map table (PMT).

4. (Original) The information recording medium according to claim 3, wherein said start packet of said plurality of divided packets is a transport stream packet having a payload of 183 bytes and said entity code is stored as data within 183 bytes from start data of said program map table (PMT) in said program information area of said program map table (PMT).

5. (Currently Amended) The information recording medium according to claim 1, wherein said entity code is stored in a program map table (PMT) specified by the MPEG standard[[,]]; and

said program map table (PMT) is stored as a payload of each of a plurality of transport stream packets in a divided manner, and each of said plurality of transport stream ~~packet~~ packets is attached with timestamp information to be stored in said information recording medium as a source packet in a distributed manner.

6. (Currently Amended) The information recording medium according to claim 1, wherein said information recording medium includes (1) a first seed, which is key generating information set for [[each]] said encryption processing unit, (2) an encrypted second seed, which is key generating information encrypted based on ~~the basis of~~ a first block key [[Kb1]] generated by said first seed, and (3) encrypted content and an encrypted entity code encrypted based on ~~the basis of~~ a second block key [[Kb2]] generated based on ~~the basis of~~ said second seed.

7. (Cancelled)

8. (Currently Amended) A data processing method for generating data to be written to an information recording medium, comprising:

~~an entity code setting step in which~~ setting a position at which an entity code ~~[[set]]~~ for an entity included in a manufacturing route of said information recording medium is to be recorded and setting is set ~~is controlled to set~~ said entity code in a program map control ~~information~~ table;

~~a table information stored packet generating step in which~~ generating a plurality of packets in which said program map control information ~~table~~ is stored in a divided manner ~~are generated~~;

~~a step in which~~ arranging said plurality of ~~table information stored~~ packets ~~are arranged~~ in a content stored packet sequence in a distributed manner; and

~~a step in which~~ encrypting data included in ~~a certain~~ an encryption processing unit is ~~encrypted~~ by use of a key generated based ~~on the basis of~~ a seed₁ which is encryption processing key generating information that is ~~is~~ set for ~~[[each]]~~ said encryption processing unit~~[[;]]~~,

wherein said ~~entity code~~ setting step includes ~~a step in which~~ executing control is ~~executed~~ such that said entity code is included in an encrypted area encrypted by a key generated based ~~on the basis of~~ said seed₁ without overlapping an area ~~[[to]]~~ in which said seed is set, wherein said entity code includes an authoring studio code identifying an authoring studio and disc manufacturer code identifying a manufacturer.

9. (Currently Amended) The data processing method according to claim 8, wherein said encryption processing unit is a collective data area of a plurality of packets, said seed is data having ~~[[the]]~~ a predetermined number of bits from start data of a start packet of said encryption processing unit~~[[,]]~~ ; and

said ~~entity code~~ setting step includes ~~a step in which~~ setting said entity code ~~[[is set]]~~ to a data area that ~~which~~ does not overlap an area of bits constituting said seed.

10. (Currently Amended) The data processing method according to claim 8, wherein~~[[, in]]~~ said ~~entity code~~ setting step~~[[,]]~~ comprises setting said entity code ~~[[is set]]~~ in a program information area of said program map table (PMT) specified by the MPEG standard and to a position of data constituting a start packet of a plurality of divided packets storing said program map table (PMT).

11. (Currently Amended) The information processing method according to claim 10, wherein said start packet of said plurality of divided packets is a transport stream packet having a payload of 183 bytes; and~~[[,]]~~

~~[[in]]~~ said ~~entity code~~ setting step~~[[,]]~~ comprises setting said entity code ~~[[is set]]~~ as data in said program information area of said program map table (PMT) and within 183 bytes from start data of said program map table (PMT).

12. (Currently Amended) A computer readable medium storing a program for ~~executing the processing that causes a computer to execute a method~~ of generating data to be written to an information recording medium, comprising:

~~an entity code setting step in which~~ setting a position at which an entity code ~~[[set]]~~ for an entity included in a manufacturing route of said information recording medium is ~~set is~~

~~controlled to set~~ to be recorded and setting said entity code in a ~~control information program~~
~~map~~ table;

~~a table information stored packet generating step in which~~ generating a plurality of
packets in which said ~~control information program map~~ table is stored in a divided manner
~~are generated~~;

~~a step in which~~ arranging said plurality of ~~table information stored~~ packets are
~~arranged~~ in a content stored packet sequence in a distributed manner; and

~~a step in which~~ encrypting data included in a ~~certain~~ an encryption processing unit is
~~encrypted~~ by use of a key generated based on ~~the basis of~~ a seed, which is encryption
processing key generating information that is set for ~~each~~ said encryption processing unit[[:]],

wherein said ~~entity code~~ setting step includes ~~a step in which~~ executing control is
~~executed~~ such that said entity code is included in an encrypted area encrypted by a key
generated based on ~~the basis of~~ said seed without overlapping an area [[to]] in which said
seed is set, wherein said entity code includes an authoring studio code identifying an
authoring studio and a disc manufacturer code identifying a manufacturer.